

PHOTOGRAPHIC RECORDS OF CAPTURED BIRDS

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DETAILED photographs of living birds held captive at banding stations have appeared from time to time especially in ornithological journals published abroad. Photographs of this sort should, it seems to me, be preserved for record far more often than they are. Killing a bird and preserving its skin or skeleton is one way of establishing a record, of course; but if the banded bird can be studied, weighed, photographed, released, recaptured, photographed again, etc., the possibilities are well nigh limitless. All sorts of plumage and growth studies might be carried on—or at least aided and abetted—in this way, not to mention the distributional data which might in time accumulate as it became apparent that certain subspecies and intermediates were identifiable, *as such*, from photographs.

The idea of photographing captured birds came to us in the spring of 1949, when several redpolls continued to visit our feeding station at Northampton, Massachusetts. Most of the birds were Greater Redpolls (*Acanthis flammea rostrata*), but a few were Common Redpolls (*A. f. flammea*). Each bird was weighed when banded and whenever recaptured, and the recorded weights showed the bigger looking birds to be, with few exceptions, the heavier. The 32 Greater Redpolls weighed (in grams) from 13.8 to 22.8 (average: 17.8), the five Common Redpolls from 11.4 to 13.8 (average: 12.9). The Greater Redpolls were definitely the longer-winged and longer-billed; indeed, we found no "birds which had measurable characters of intermediate proportions" (see Shaub, B. M., 1950. *Bird-Banding*, 21: 105–111). Interested in keeping a visual record of some of these differences without collecting, we decided to try photographing the birds, close-up, side by side, in such a way as to obtain strictly comparable pictures.

A major problem was that of holding the birds quiet in one position at exactly the same distance from the lens without in any way injuring them. We soon decided that transparent containers were what we needed. With these no tying down of the wings was necessary, the birds could be placed in any desired position, and shadows and reflections could be kept to a minimum by adjusting the source of light.

Using cellophane of .008 in. thickness, we made cylinders just large enough for each bird, tacking the material in place with transparent cellulose tape. A glass-sided container large enough for two cylinders we made by sawing kerfs in a piece of wood and trimming pieces of glass to fit (see Fig. 1B). The spaces at the ends of the cellophane tubes were not sealed shut, so the birds had plenty

¹ Contribution No. 11 from the Shaub Ornithological Research Station.

of air. In tubes the birds settled down quite satisfactorily. Unable to lift their wings at all, they did no fluttering and almost no kicking or scratching.

Because the birds' head-movements were frequent and unpredictable we used a synchronized flash when making exposures. The camera, on a tripod, was set in a vertical position. The 'tubed' birds, in their container, were placed on a platform and illuminated with the usual tungsten bulbs. The exact position of the container was marked by guides or stops, so as to facilitate replacing it with precision. Frequent removal and replacement was necessary for the position of the birds had to be adjusted. In the container shown in Fig. 1B the end-piece, c, was of glass. Had this been of some dark material, wood perhaps, the birds might not have tried so hard to crawl forward.

When the birds were in exactly the position desired, we pushed the button controlling the flash apparatus. We found it best to hold the reflector in the hand so as to be able to shift the direction of the illumination quickly in making additional exposures.

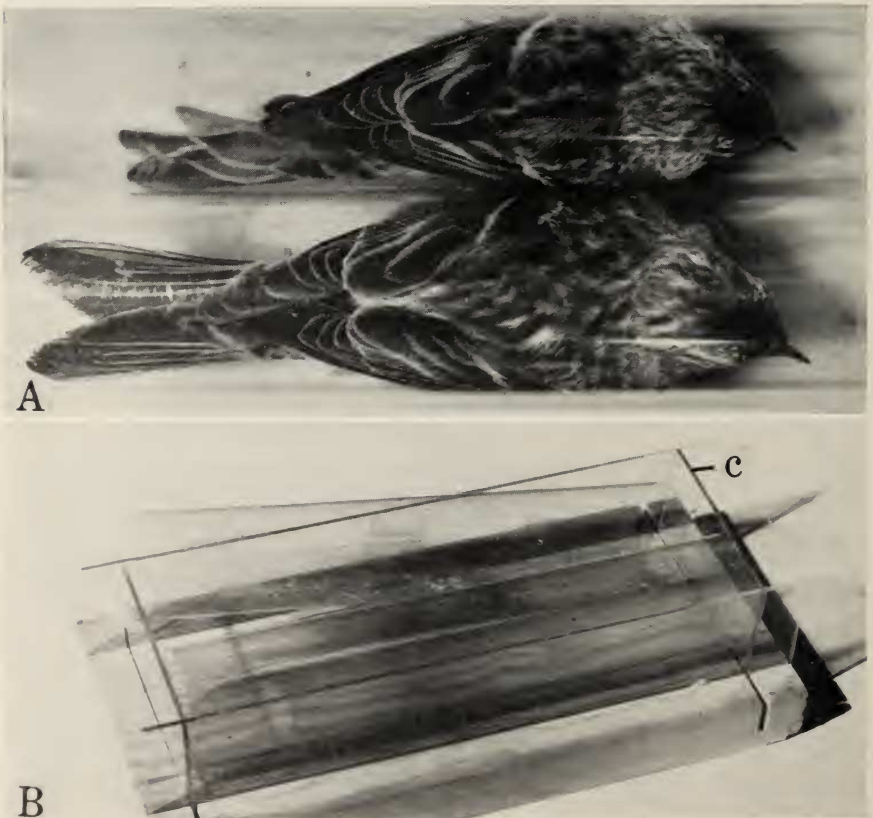


Fig. 1. A. Living redpolls in cellophane cylinders. Above is a Common Redpoll (*Acanthis f. flammea*), below a Greater Redpoll (*A. f. rostrata*). B. Cellophane cylinders and glassed-in container. Photographed March 25, 1949, by B. M. Shaub.

In photographing captured birds in this way the greatest depth of field and sharpness of detail are obtainable through closing the diaphragm opening well down and using a fast shutter speed synchronized to catch the very peak of illumination. Unless this is done the rapid movements of the birds result in blurred negatives.

The cellophane cylinder and cylinder-container described above may not be the best apparatus devisable for this work. Other methods should be tried. Photographs like those made at the Fair Isle Bird Observatory, showing heads, feet, or spread wings of living birds should be taken (see *Wilson Bulletin*, 62: 141-143). If a series of photographs, showing increase in bill-size over a period of years, is to be taken, the method should be worked out with great care so as to make certain in advance that the photographs will be *directly measurable* and strictly comparable. For this sort of record far more than mere sharpness of detail will be necessary: the bill must be strictly in profile, so as to preclude the possibility of any distortion. The bills themselves should be measured too, of course, and the records kept with the photographs.

For records of color-differences, color transparencies should be made. These should be preserved with great care so as to prevent fading.

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AMENDMENT TO THE CONSTITUTION OF THE WILSON ORNITHOLOGICAL CLUB

An amendment to the Constitution of The Wilson Ornithological Club was proposed by the Executive Council and placed before the membership at the annual meeting on April 27, 1951, at Davenport, Iowa. The proposal was published in the June, 1951, issue of *The Wilson Bulletin*. In accordance with the provisions of the By-laws, the members were asked to vote on this amendment by mail before September 1.

As a result of this ballot, the amendment was adopted, effective October 1, 1951. The amendment eliminates the associate membership class and raises the subscription price of *The Wilson Bulletin* to \$3. With this change, the minimum cost of membership becomes \$3. Hence, Sections 1 and 3 of Article II of the Constitution now read as follows:

ARTICLE II

Membership

Section 1. The membership of this club shall consist of five classes: Active Members, Sustaining Members, Life Members, Patrons, and Honorary Members.

Section 3. The annual dues of Active Members shall be three dollars (\$3.00); and of Sustaining Members, five dollars (\$5.00). Any member may become a Life Member, exempt from further dues, by making a payment into the endowment fund of the Club of one hundred dollars (\$100.00). Any member may become a Patron, exempt from further dues, by making a payment into the endowment fund of the Club of five hundred dollars (\$500.00) or more. Upon the unanimous recommendation of the Executive Council, honorary membership may be conferred by the Club by a three-fourths vote at any annual meeting.